United States Department of Agriculture

Soil Conservation Service

Salt Lake City,



# Utah Water Supply Outlook

January 1, 1986



# Foreword

## **How Forecasts** Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumi lates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologis estimate the runoff that will occur when it melts. Predictions are based on careful measurements of sno water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflc data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir stora data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weath Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes know For this reason, forecasts are issued that reflect three future precipitation conditions — Below Norm Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasona maximum. Actual streamflow can be expected to fall between the lower and upper forecast values el out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement method Manual readings of snow depth and water equivalent are taken at locations called snow courses c monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitat temperature, and other parameters are monitored on a daily basis and transmitted via radio telem to central data collection facilities. Both monthly and daily data are used to project snowmelt rui

# For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the st listed below. Because of the limited space, snow survey measurements are not published in mor reports. An annual snow survey data summary is published by the Soil Conservation Service for of the western states. Historical snow survey data may be obtained at those same offices.

**ADDRESS** STATE

201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687 Alaska

201 East Indianola, Suite 200, Phoenix, AZ 85012 Arizona

2490 West 26th Ave., Denver, CO 80211 Colorado

(New Mexico)

304 North 8th Street, Room 345, Boise, ID 83702

10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715 Idaho Montana

50 South Virginia Street, Third Floor, Reno, NV 89505

Nevada 1220 Southwest 3rd Ave., 16th Floor, Portland, OR 97204

4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147 Oregon Utah

360 U.S. Court House, Spokane, WA 99201

Washington Federal Building, 100 East "B" Street, Casper, WY 82602 Wyoming

In addition to state reports, a Water Supply Outlook for the Western United States is published Soil Conservation Service and National Weather Service monthly, January through May. Reports obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Br Room 547, Portland, OR 97209.

# Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey California Department of Water Resources, P.O. Box 388, Sacramento, CA 98502; British Columbi Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British C V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Bra Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Saskatchewan, and N.W.T. — The Wat of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

# Utah Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys

## issued by

Wilson Scaling Chief Soil Conservation Service Washington, D. C.

## Released by

Francis T. Holt State Conservationist Soil Conservation Service Salt Lake City, Utah

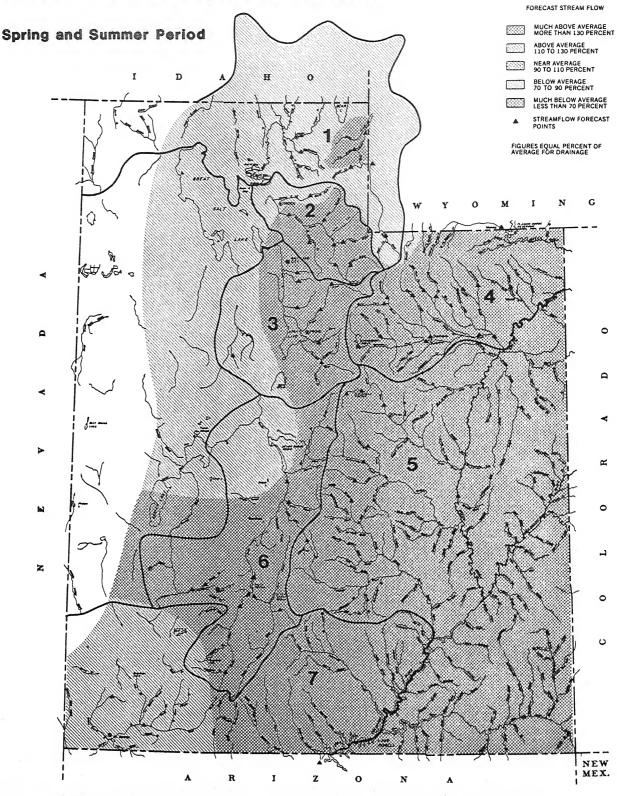
#### In cooperation with

Utah State Department of Natural Resources
Robert L. Morgan
State Engineer
Division of Water Rights
Division of Water Resources

## Prepared by

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Snow Survey Supervisor
Soil Conservation Service
125 So. State St., Fed. Bldg.
P. O. Box 11350
Salt Lake City, Utah 84147

# **Streamflow Prospects for Utah**



- 1 BEAR RIVER BASIN
- 2 WEBER & OGDEN WATERSHEDS IN UTAH
- 3 UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
- 4 UNITAH BASIN & DAGGET SCD'S
- 5 CARBON, EMERY, WAYNE, GRAND, & SAN JUAN CO. 6 SEVIER & BEAVER RIVER BASINS
- 7 E. GARFIELD, KANE, WASHINGTON, & IRON CO.

## GENERAL OUTLOOK

#### SUMMARY:

Excellent water supplies are forecasted for this season with the heavy fall precipitation and early snowfalls. Saturated mountain soil profiles and current snowpacks ranging from normal to twice normal support forecasts of spring and summer streamflows of the same magnitude

# SNOWPACK:

Snowpack on all watersheds of the state which were surveyed was greater than normal for January 1. Southwestern Utah, compared to average, had the least snow with 114% while the Uinta Mountains came in at an impressive 174%.

## PRECIPITATION:

Precipitation at mountain stations was well above average over the entire State for the October through December period ranging from 121% in the southwest to 163% over the Uinta Mountains.

#### RESERVOIRS:

Storage in 26 of the major reservoirs in Utah as of the end of December was at 134% of average for that date. Carryover was very good again this year in most reservoirs in the state.

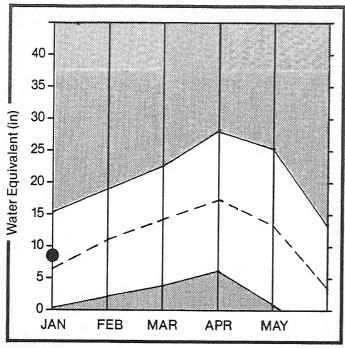
#### STREAMFLOW:

Water supply forecasts throughout the state are near to much above average ranging from 90% for South Willow Creek near Grantsville to more than three times average on the Sevier.

Forecasts prepared for this bulletin represent cooperative efforts of the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to water users and managers.

# **Bear River Basin**

# Mountain snowpack\* (inches)



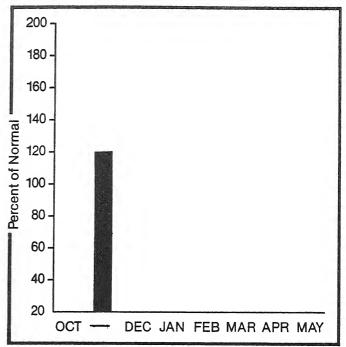
\*Based on selected stations

Maximum Minimum

Average

Current

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

#### WATER SUPPLY OUTLOOK:

Snowpack on the Bear River Watershed stands at 134% of the January 1 average. Snowpack on the Logan River is 131% of normal for this time of year. Streamflow forecasts range from 102% for Smith's Fork near Border to 137% for Big Creek near Randolph. Seasonal precipitation (October through December) is at 121% of average. Reservoir storage ranges from 103% of average in Hyrum Reservoir to 221% in Porcupine Reservoir.

For more information contact your local Soil Conservation Service office: Tremonton Field Office

Logan Field Office

801-257-5403 801-753-5616

## BEAR RIVER BASIN

#### STREAMFLOW FORECASIS

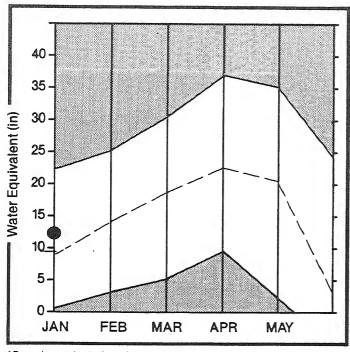
FORECAST POINT	FORECAST PERIOD	AUE,		MOST PROBABLE (% AVE.)	REAS: MAX. (% AVE:)	REAS: MIN. (% AVE.)	PEAK FLOW	PEAK DATE	1 ON FLOW (CES)	) nu DATE
BEAR RIUER near UT-WY Stateline	APR-JUL	110.0	127.0		145.5	82.7	1706			
BEAR near Moodruff	APR-JUL	139.0	153.0	110.0	164.0	53.2				
WBODRUFF CREEK near Woodruff	APR-JUL	17.3	19.4	112.0	138.7	80.9	271			
BIG CREEK near Randolph	APR-JUL	5.3	7.3	137.0	188.7	<i>7</i> 5₊5	όŬ			
BEAR near Randolph	APR-JUL	110.0	143.0	130.0	197.3	62.7				
THOMAS FORK near Stateline	APR-SEP	35.0	36.0	102.0	131.4	74.3				
SMITHS FORK mear Border	APR-SEP	119.0	122.0	102,0	130.3	74.8				
BEAR RIVER near Harer	APR-SEP	310.0	325,0	104.0	145.8	71.0				
LOGAN RIVER near Logan	APR-JUL	116.0	134,0	115.0	145.7	89,7	1140			
BLACKSMITH FORK near Hyrum	APR-JUL	51,0	58.0	113.0	164,7	68.6				
LITTLE BEAR RIVER near Paradise	APR-JUN	38.0	45.6	120.0	178,9	63.2	520			
CUB RIVER near Preston	APR-JUL	46.8	51,0	108.0	175.1	66.Z	520			
						2012				

RESERV	VOIR STORAGE		(1000AF)		I MATERSHED SNOWPACK ANALYSIS						
RESERVOIR	USEABLE I CAPACITYI I		EABLE SIOR LAST YEAR	RAGE **   RAGE **   AVE,	WA FERSHED	พก. COURSES AUE.D		YEAR AS % OI			
BEAR LAKE	1421.0	1073.7	1095.3	973.3	BEAR RIVER, UPPER IN UTAH	 4 5	92				
TYRUM	15.3	10.3	10.3	10,0	BEAR RIVER, LOMER IN UTAH	1 10	83	147			
ORCUPINE	11.3	6.2	3.7	2+8	BEAR RIVER DRAINAGE IN UC	3	85	143			
OODRUFF NARROWS		NO REPO	art .		BEAR RIVER, HPPER (sbove	15	101	123			
OODRUFF CREEK		NO REPO	ORT		BEAR RIVER, LOWER (below		92	145			
			Table 1		BEAR RIVER DRAINAGE	23	76	133			
					LOGAN RIVER	5	75	131			
					PAFT RIVER	o.	0	0			
					BEAR RIVER BASIN	27	91	134			

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

# Weber & Ogden Watersheds

# Mountain snowpack\* (inches)



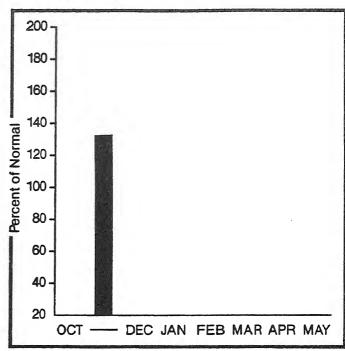
\*Based on selected stations

Maximum Minimum

Average ————

Current ----

## Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

# WATER SUPPLY OUTLOOK:

Snowpack on the Weber River Watershed is 145% of the January 1 average. Odden River snowpack is 154% of normal. Streamflow forecasts range from 121% of average for Pineview Reservoir Inflow to 160% for Chalk Creek near Coalville. Precipitation for the October through December period averaged 133% of normal across the basin. Reservoir storage as of the end of December stood at 136% of average and 78% of total usable capacity.

For more information contact your local Soil Conservation Service office:

Layton Sub Office 801-544-9144

# WEBER & OGDEN WATERSHEDS in Utah

#### STREAMFLOW FORECASTS

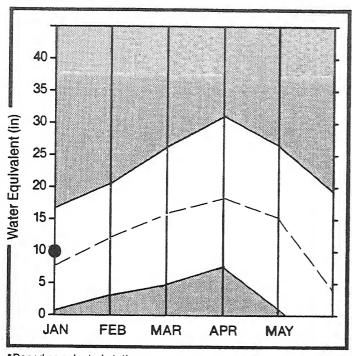
FORECAST POINT	FORECASI	20 YR.	MOST	MUS!	REAS.	REAS.	PEAK	PEAK	Furi	Г.U. <del>н</del>
	PERIOD	(1000AF)	PROBABLE (1000AF)	PROBABLE (% AVE.)	MAX. (% AUE.)	M10, (% AUE.)	FLOH (CFS)	DATE	FLOH (CFS)	DATE
EBER RIVER near Oaklev	APR-JUN	102.0	142.0	139.0	176.5	105.9	2007			
OCKPORT PESERVOIR inflow	APR-JUN	177		146.0		100.9				
HALK CREEK near Coalville	AFR-JUN	36.0	58.0	160.0	211.0		860			
4EBER PIVER near Coalville	APR-JUN	119.0	177.0	148.0	195.8	110.9	3.70			
.0ST CREEK near Crovden	APR-JUN	15.6	20.7	132.0	198.7	70.5				
EAST CANYON CREEK near Morgan	APR-JUN	25.0	32.0	128.0	184.0	80.0				
HARDSCRABBLE CREEK near Porterville	AFR-JUL	18.4	24.0	130.0						
OUTH FORK OGDEN PIVER near Huntsvil	APR-JUN	57.0	70.0	122.0	157.9	82.5				
THEVIEW RESERVOIR inflow	APR-JUN	115.0	140.0	121.0		86.1				
HO PESERVOIR inflow	APR-JUN	145.0	218.0			112.0				
BER RIVER at Gateway	AFR-JUN	300.0	420.0	140.0		105.ŭ				
ARMINGTON CREEK near Farmington	APR-JUL	8.2	10.0							
						70.0				

	RESERVOIR STORAGE	I I MATERSHED SWOMPACK AWALYSIS I						
RESERVOIR	USEABLE   CAPACITY	THIS	EABLE STO	1	WATERSHED	ип. COURSES	THIS YE	AR AS % OF
CAMPA		YEAR	YEAR	AVE. I		AVE.D	LAST YR	· AVERAGE
CAUSEY	a.9	1.9	5,2	2.1	OGDEN RIVER	4	75	154
EAST CANYON	48.1	41.0	46.6	33,3	MEBER RIUFR	13	84	
ЕСНО	73.9	57.5	69.0	41.4 I	WEBER & OGDEN WATERSHEDS	17		145
LOST CREEK	20.0	15.3	16.9	12.7	VENERA & GONTH MALEKSUEDS	17	81	147
PINEVIEH	115.			, 1				
	110.1	68.9	74.0	50.0				
ROCKPORT	60.9	38.5	48.0	34.1				
HILLARD BAY	165.5	155.1	168.2	104.9				
				10-11				

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period,

# Utah Lake, Jordan River & Tooele Valley



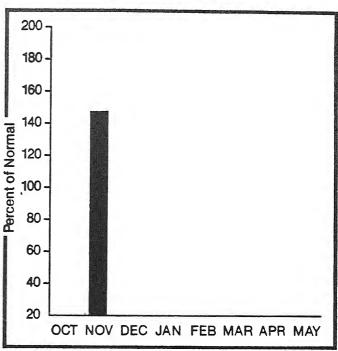


\*Based on selected stations

Maximum \_\_\_\_\_

Average ---Current ----

# Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

# WATER SUPPLY OUTLOOK:

Snowpack on the Provo River is 152% of normal for the first of January. Snowpack for the entire Utah Lake drainage is 134% of average. The drainages along the Wasatch front east of Salt Lake Valley have 124% of normal snowpack. Streamflow forecasts range from near normal in Tooele County to more than twice normal on Emigration Creek near Salt Lake City. Mountain precipitation totals for October through December were 148% of average, Reservoir storage is 148% of average.

For more information contact your local Soil Conservation Service office:
Midvale Field Office 801-524-4373
Provo Field Office 801-377-5580

## UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

#### STREAMFLOW FORFCASTS

FORECAST POINT		20 YR: AUF: (1000AF)	PROPABLE	PROBABLE	MAX.	HTH:	FI_O <sup>U</sup>	(CFS)	
'ROVO near Hailatone	스타다=.1111	104.0	145.0	134.0	179.7	98.1		 	
PROUN below Deer Creek Dam									
MERICAN FORK near American Fk.									
HABBLE CREEK near Springville	AFF-JUL	18.7	30.0	160.0	273.0	54.0			
STRAMBERRY RESERVOIR inflow	APR-JIIL	53.0	88.0	166.0	194,3	128.3			
PAYSON CREEK near Payson	HPF-JUL	6.2	9:1	146.0	250.0	41:0			
UTAH LAKE inflow	APR-JUL	238.0	425.0	178.0	229.4	178,6			
LITTLE COTTONHOOD CRK nest SLC	AFF-JUL	38.0	48.0	126.0	144.7	100.0			
BIG COTTONWOOD CRK near SLC	APR-JHL	37.0	50.0	135.0	151:4	116.2			
PARLEY'S CEEK near SLC	APF-JUL	14.8	21.0	141.0	187.4	108.1			
MILL CREFK near SLC	APR-JUL	5,8	9.0	155.0	204,9	103 - ₹			
EMIGRATION CREEK near SLI	mP\$-JUL	3.7	9.0	243.0	414.3	100.0	)		
CITY CREEK near SLC	APR-JUL	7.7	11.0	142.0	243.9	59.0	•		
SETTLEMENT CREEK near Togele						57.	ű		
SOUTH WILLOW CREEK near Grantsville						33.3	1		
VERNOW CREEK nest Vernon	APF-JUN	827.0	992.0	119.0	183.9	56.0	)		

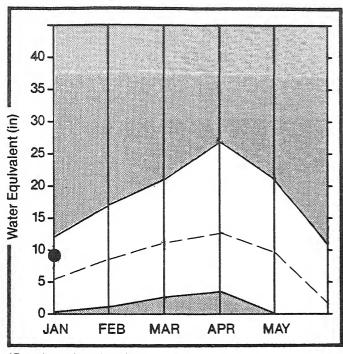
	PESERVOIR STORAGE		(1000AF)   	MATERSHED SK	IUMBACK YM	ALYSIS
RESERVOIR	USEABLE I CAPACITYI	 #≒ NS THJ5	 BEABLE SYMPAGE ##   LAST	чатеренго	មក. COURSES	THYS YEAR AS % OF
	1	YEAR	YEAR AVE: 1		40E : D	TAST YE. AMERAGE
DEED CREEK	149.7	128.0	123.3 93.5	PPOVO PIVER & UTAH LAKE	Ģ.	92 134
SETTLEMENT CREEK	1.0	8.0	0.0 0.6	PROUD RIUFR	ď,	109 152
STRAWBERRY-FMLARGED	951.4	.506.0		MRDAN RIVER & GREAT SALT	5	.72 <b>.124</b>
UTAH LAKE	883.9	900.0	1155.4 601.6	TORELE VALLEY MATERSHEDS	6	0 - 0
VERNON CREFK	().é	0.2	0.6 0.4	UTAH LAKE, JORDAN RIVER 8	14	83 130

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage.

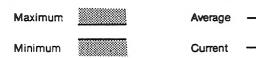
f = -0e is for 1961-80 period.

# **Uintah Basin & Dagget SCD's**

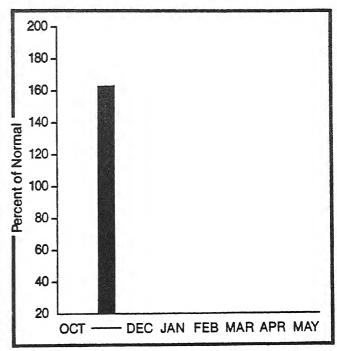




\*Based on selected stations



# Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

# WATER SUPPLY OUTLOOK:

January 1 snowpack on drainages in the Uintas was well above average ranging from 133% on Ashley Creek to 224% on Lakefork-Yellowstone Creeks. The ten courses on the Duchesne River averaged 90% above normal. Streamflow forecasts range from 125% for Black's Fork near Millburne to 202% for the Duchesne near Myton. October through December precipitation was 163% of average. Stored water in the reservoirs of the Uintah Basin is 143% of average.

For more information contact your local Soil Conservation Service office:

Roosevelt Field Office 801-722-4621

# UINTAH BASIN & DAGGET SCD'S

# STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	AUE:	MOST PPOBABLE (1000AF)	MOST PPOBABLE (% AUE.)	PEAS: MAX. (% AVE.)	PEAS: MTN, (% AUE,)	PFAK FLOH (CFS)	DATE DATE	I NU FLOW (CFS)	( nu DATE
DUCHESME RIVER near Tabiona	APE-JUL	105.0	150,0	142.0	168.6	111:4				
DUCHESME RIVER near Duchesme	APR-JUL	189.0	275.0	145.0	176.7	115.3				
STRAMBERRY RIVER at Duchesne	APR-JUL	58.0	95.0	163,0	237,9	89,7	890			
POCK CREEK near Mountain Home	APR-JUL	93.0	135.0	145.0	179,6	118,3	1980			
CURRANT CREEK near Fruitland	APR-30!	20.0	31.0	155.0	200.0	110.0				
LAKEFORK RIVER near Mountain Home	APR-JUL	70.0	95.0	135.0	170.0	107.1				
YELLOWSTONE RIVER near Altonah	APR-JUL	65.0	88.0	135.0	176.0	ବ୍ୟ, ମ				
DUCHESME near Myton	APF-JUL	205.0	415.0	202.0	242.4	145.4				
WHITE POCKS RIVER nest Whiterooks	APR-JUL	58.0	88.0	151.0	190.1	110.0				
UINTAH RIVER mesh Peols	AFP-JUL	86.0	130.0	151,0	103.0	109.3				
DUCKESME near Randlett	APR-JUL	257.0	500.0	194.0	238,5	190.6				
MEST FORK DUCHESHE PAMER hear Henna	APP-JUL	26.0	37.5	144,0	176.9	107.7				
HEMPY'S FORK near Manile	APP-SFP	48.0	67.0	139.0	185.4	104.2				
BLACK'S FORK nest millborne	APR-JUL	90.0	113.0	125.0	200.0	51.1				
FLAMING GORGE RESERVOIR inflow	AFR-JUL	1248.0	1560.0	125.0	160.0	94.0				
ASHLEY CREEK near Vernal	APR-JUL		69.0	135.0	148.6	107.8				

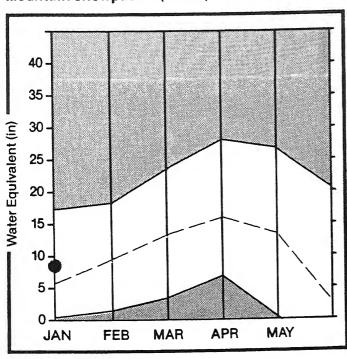
FE	SERVOIR STOPAGE		(1000AF)	1	MATERSHED SHOWPACK ANALYSIS					
RESERVOIR	USEABLE   CAPACITY  		EABLE STORA LAST YFAR	AGE **   AGE **   AUE,	WATERSHED	NO. COURSES AUE.D	THIS YEAR			
FLAMING GORGE	3749.0	3117.0	3373.0		UPPER GREEN RIVER in Ulah		108	140		
OON LAKE	35.8	17.6	24.8	13.6	ASHLEY CREEK	2	102	133		
ED FLEET	26.0	17.0	18.8	<del></del>	BLACK'S FORK RIVER	3	104	139		
TEINAKER	33.3	29.0	29.5	18,2	SHEEP CREEK	2	134			
TARUATION	165.3	147.0	124.2	105.2 1	DUCHESME RIVER	10	107	157		
TRANBERRY-ENLARGED	951.4	506.0	271.7	-2	LAKE FORK-YELLOWSTONE CRE	3	113	190 274		
					STRAMBERRY PIVER	4	105	169		
					UINTAH-WHITFROCKS RIVERS	2	113	174		
					UINTAH BASIN & DAGGET SCD	19	107	174		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage.

Average is for 1961-80 period:

# Carbon, Emery, Wayne, Grand, and San Juan Co.

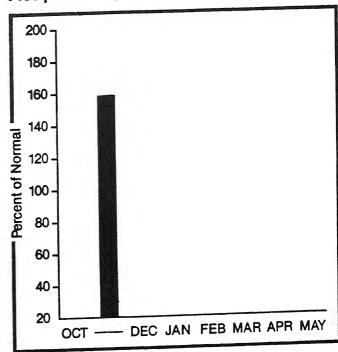




\*Based on selected stations



# Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

## WATER SUPPLY OUTLOOK:

Snowpack on Southeastern Utah watersheds ranges from 121% of average on the Blue Mountains to 153% for the San Rafael. Streamflow is forecast 110% for Seven Mile Creek near Fish Lake ranging upward to 156% for Ferron Creek near Ferron. Precipitation at mountain stations for the October through December period was 159% of normal. Reservoir storage stands at 132% of average for the four area reservoirs with an established average ranging from 113% for Joe's Valley to 243% for Millsite.

For more information contact your local Soil Conservation Service office:
Price Field Office 801-637-0041

#### CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.

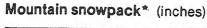
#### STREAMFLOW FORECASTS

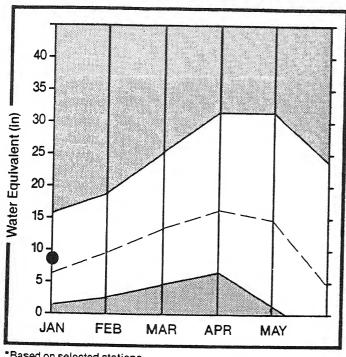
FORECAST POINT	FORECAST PERIOD	20 YR: AUE: (1000AF)	MOS( PPOBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS: MAX: (% AUE:)	REAS: MIN. (% AVE.)	PEAK FLOH (CFS)	PEAK DATE	lnΨ FLOW (CFS)	DATE.
GOOSEBERRY CREEK near Scofield	APR-JUL	10,7	14.0	130.0	222,0	54.0				
SCOFIELD RESERVOIR inflow	APR-JUL	38.0		136.0	178.9	102.6				
PRICE near Heiner	APR-JUL	63.0	95.0	150.0	256.0	62.0				
HUNTINGTON GREEK near Huntington	APR-JUL	49.0	75.0	153.0	198.0	118.4				
COTTONWOOD CREEK near Orangeville	APR-JUL	47.0	73.0	155,0	193.6	117.0				
FERRON CREEK near Ferron	APR-JUL	37.0	58.0	156.0	200.0	113.5	654			
NUDDY CREEK near Emery	APR-JUL	18.5	26.0	140.0	200.0	81.1	223			
COLOFADO near Cisco, Ul	APR-JUL	3046.0	4600.0	151.0	209.0	105.0				
REEN near Green Rv., UT	APR-JUL	3016.0	4000.0	132.0	168.6	94.6				
MILL CREEK near Moab	APR-JUL	5.5	8.6	156,0	218.2	90.9				
MAVAJO RESERVOIR inflow	APR-JUL	684.0	950.0	138,0	198.8	93.9				
SAN JUAN near Bloff, Ul	APR-JUL	975.0	1300.0	130.0	198.7	78.7				
BEVEN MILE CREEK near Fish Lake	APR-JUL	₽v3.	7.2	110.0	169+2	46.2				

, RE	BERVOIR STORAGE		(1000AF)	; ; ;	I HATERSHED SNOMPACK ANALYSIS I						
RESERVOIR	USEABLE 1 CAPACITY!	≉≭ US THIS YEAR			WATERSHED	NO. COURSES AUE.D		AR AS % OF			
HUNTINGTON NORTH	3.9	1.5	4.1	2.0	PRICE RIVER	3	97	139			
OE'S VALLEY	54.6	46.4	50.0	42.7	SAN RAFAEL RIVER	7	81	153			
EN'S LAKE	2.3	0.9	0.0	<del></del>	MUDDY RIVER	2	92	172			
ILL SITE	16+7	7.3	9,3	3.0 I	FREMONI RIVER	3	109	152			
OFIELD	65.8	45.0	47.6	30.3	LASAL MOUNTAINS	2	182	136			
				    	BLUE MOUNTAINS	2	119	121			
					ESCALANTE RIVER	ı	85	124			
					VIRGIN RIVER	4/	56	117			
					CARBON, EMERY, WAYNE, GRA	24	88	138			

orrected for upstream diversions or changes in reservoir storage. verage is for 1961-80 period.

# Sevier & Beaver River Basins





\*Based on selected stations

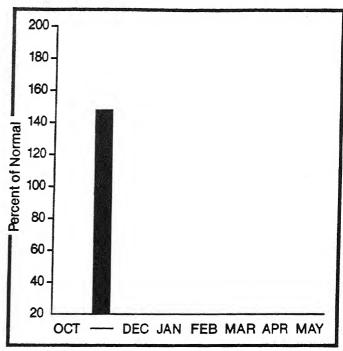
Maximum

Minimum

Current

Average

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

#### WATER SUPPLY OUTLOOK:

Snowpack on the Sevier River watershed ranges from 125% on the South Fork to 139% on the Lower Sevier. Beaver River snowpack is 189% of normal for January 1. Water supply forecasts on the Sevier range from 131% at Hatch to 346% on the Sigurd to Gunnison reach. The Beaver River is forecast 139% with Minersville Reservoir Inflow forecast 203% through December precipitation over the watershed was 151% of normal. Reservoir storage in the Sevier basin is 83% of capacity and 212% of average.

For more information contact your local Soil Conservation Service office:

Richfield Field Office **801**-896-6261 Fillmore Field Office

#### SEVIER & BEAVER RIVER BASINS

#### STREAMFLOW FORECASIS

FORECAST POINT	FORECASI	AUE,	MOSI PROBABLE	MOST PROBABLE	REAS:	PEAS:	PEAK FLOW	PEAK	( nu Fl.04	l Uri
		(1000AF)	(1000AF)	(% AVE+)	(% AUE.)	(% AVE+)	(CFS)	DAIE	(UFS)	DATE
SEVIER at Hatch	APR-JUL	48.0	63.0	131,0	187,5	87.5				
SEVIER near Circleville	APP-JUL	38.0	40.0	157.0	Z68₊0	65.0				
SEVIER near Kingston	APR-JUL	29.0	40.0	137.0	255+2	51.7				
ANTIMONY CREEK near Antimonv	APR-JUL	, 10.3	11.0	106.0	182.0	44.0				
E F SEVIER near Kingston	APR-JUL	18.9	30.0	159.0	264.0	106.0				
SEVIER blw Piute Dam	APR-JUL	45.0	70.0	155.0	264.4	80.0				
CLEAR CREEK near Sevier	APR-JUL	18.9	25.0	132.0	225.0	54.0				
SIGURD to GUNNISON	APR-JUL	26.0	90.0	946.0	457.7	245.2				
KINGSTON to VERMILLION DAM	APP-JUL	45.0	110.0	244.0	416.0	100.0				
VERMILLION DAM to GUMMISON	APR-JUL	35.0	100.0	285.0	486.0	117.0				
SALINA CREEK st Salina	APREJUL	11.9	24.0	201,0	343.0	83.0				
SEVEER on Gunnison	APR-JUL	54.0	150,0	277.0	472.0	114,0				
CHALK CREEK near Fillmore	APR-JUL	16.4	18.9	115.0	176.8	54.9				
CHICKEN CREEK near Levan	APR-JUL	375	4,9	128.0	171.4	85.7				
DAK CREEK near Oak City	APR-JUL	1.6	1.9	118.0	187.5	0.0				
EPHRAIM CREEK near Ephraim	APR-JUL	14,9	20.0	134.0	228.0	59.0				
PLEASANT CREEK near Pleasant	APR-JUL	8.6	11.0	127.0	217.0	52.0				
SALT CREEK nest Nephi	APR-JUL	13,5	15,1	111.0	207.4	14.8				
BEAVER RIVER near Beaver	APR-JUL	23,0	32.2	137.0	213.0	82+6	347			
NORTH CREEK near Beaver (combined N	APR-JUL	14.6	19.7	134.0	232.9	41.1				
MINERSVILLE RESERVOIR inflow	APR-JUN		18.1		280.9	123.6				

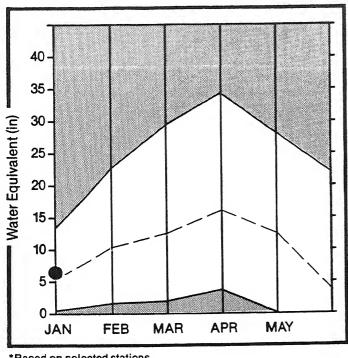
	RESERVOIR S	RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS					
RESERVOIR	**************************************	USEABLE I CAPACITYI	** USEA THIS YFAR	BLE STORAG LAST YEAR	GE **     AVE.	MA (ERSHED	να. COURSES		YEAR AS % O		
GUNNTSON		18.2	16.8	15.8	7.5	UPPER SEVIER PIVER (so	AVE , D	1.A51	YP. AVERAG		
20)117.0011		1012	10.0	1310.	7 (-)	OLLEK SEATEK LIVEK (20	otn 11	. "	128		
INERSVILLE (RkvFd)		26.0	15.1	22.2	9.3	EAST FORK SEVIER RIVER	4	91	194		
OTTER CREEK		52.5	50.2	49.3	23.8	SOUTH FORK SEVIER RIVE	R 7	68	125		
PIUTE		71.8	46.5	59.1	29.3	LOWER SEVIER RIVER (in	clu 12	98	139		
SEVIER BRIDGE		236.0	208.1	201.4	87.0	BEAVER RIVER	. 2	122	199		
ANQUITCH LAKE		22.3	18,7	0.0	1	SEVIER & BEAVER RIVER	BAS 25	70	1.89		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage.

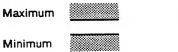
Average is for 1961-80 period.

# E. Garfield, Kane, Washington, & Iron Co.



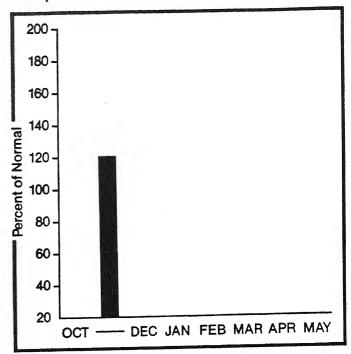


\*Based on selected stations



Average Current

## Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation

Year to date precipitation

## WATER SUPPLY OUTLOOK:

Snowpack on Southwestern Utah watersheds is slightly Enterprise to New Harabove average for January 1. Snow on the Virgin River is mony snowpack is 105% Water supplies are forecast above 117% of normal. average assuming normal snow accumulation for the Forecasts range from remainder of the snow season. 113% for Santa Clara to 145% for the Virgin. Mountain precipitation for October-December average.

For more information contact your local Soil Conservation Service office:

# E. GARFIELD, KANE, WASHINGTON, & IRON Co.

# STREAMFLOW FORECASIS

								PEAK	runi 	Furi
	FORECASI	20 YR: AUE:	MOSI PROBABLE	MOS ( PROBABLE	REAS: MAX.	REAS: MIN.	PEAK FLOW		FLOW (CFS)	DATE
FORECAST POINT	PERIOD	(1000AF)	(1000AF)	(% AUE.)	(% AUE.)	(% AUE.)	(CFS)	DATE		
				145 4	195.0	113.0				
VIRGIN near Hurricane	APR-JUL	62.0	90.0	145.0						
SANTA CLARA near Pine Vallev	APR-JUL	5.3	6.0	113.0	192.0					
COAL CREEK near Cedar City	APR-JUL	18.9	27,0	119.0	168.5	87.0				
	APR-JUL	7462.0	10600.0	142,0	192.1	99.0				
LAKE POWELL inflow			3.0							

	RESERVOIR STORAGE	(1000AF)	HATERSHED SNOWPACK ANALYSIS				
	USEABLE I	** USEABLE STORAGE ** THIS LAST	I WATERSHED	νη. COURSES AVE.D	THIS YEAR AS % OF		
RESERVOIR	CAPACITY!	YEAR YEAR AVE.			LAST YR. AVERAGE		
BLUE MESA	830.0	566.0 663.0 432.0		4 2	39 105		
LAKE POWELL	25002.0	22993.0 (22605.0	ENTERPRISE TO MEW HARMON'S COAL CREEK	3	63 113		
			E. GARFIELD, KANE, WASHI	N 9	68 114		
			L. CINC				

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage.

Average is for 1961-80 period.

# **Utah Snow Course Measurements**

# January 1, 1986

SNOHCOURSE	ELEV.	DATE	SHOW DEPTH	HATER CONTENT	LAST YEAR	AVERAG 1961-8
ASHLEY THIN LAKES	10500	Nor	scheduled	this month		
ASHLEY THIN LAKES ATHOOD LAKE	10500	01/01	-	9.5	-	-
BEAVER CREEK DIVIDE	8280	12/26	26	7.2	6.9	4.8
BEAVER CREEK R.S. BEAVER CREEK-SKUNK	7500 7150	*			5.5 9.3	3.7 4.8
BEAVER DAMS	8000	12/28	22	6.3	6.0	4.3
BEAVER RACE TRACK	6020	*			~	-
BEN LOMOND PEAK BEN LOMOND TRAIL	8000 6000	12/26 12/26	63 44	20.3	26.5	12.6
BEVAN'S CABIN	6456	01/02	19	4.8	15.6	5.5 5.5
BIG FLAT	10290	12/31	52	15.0	-	6.6
BIRCH CROSSING	9100 9400	01/06	16	4.0	3.7	3.3
BLACK'S FLAT-U.M. CK	9200	12/28	24	6.5 7.9E	6.9	4.9 5.4
BLACK'S FORK GS-EF	9340	12/26	17	4.2	4.3	3.4
BLACK'S FORK JUNCTH	8730	12/26	19	4.5	5.4	3.5
BOX CREEK BRIAN HEAD	9300 10000	12/29 12/30	25 36	6.8	8.2	5.0
BROWN DUCK RIDGE	10600	12/27	44	11.2 13.5	12.8 12.5	8.7 5.7
BRYCE CANYON	8000	12/30	10	2.5	2.7	2.0
BUCK FLAT BUCK PASTURE	9800	12/28	32	10.0	11.7	6.7
BUCKBOARD FLAT	9700 9000	Not 12/19	scheduled 1 28	this month	5.9	
BUG LAKE	7950	12/26	34	8.0 10.3	11.1	7.1 6.1
BURNT CREEK	7900	*			1.3	2.4
BURT'S-MILLER RANCH CAMP JACKSON	7900	12/26	12	3.6	2.8	2.3
CASTLE VALLEY	8600 9580	12/19 12/31	30 28	8.6	8.0	6.6
CEDAR CITY GOLF COUR	5800	#	28	6.1	9.2	6.1
CHALK CREEK #1	9100	12/26	48	15.7	14.3	8.8
CHALK CREEK #2 CHALK CREEK #3	8200	12/26	32	9 - 1	14.3	6.1
CHEPETA	7500 10300	12/26 12/27	19 35	4.6	4.9	3.5
CHEPETA-HHITERKS. LK	10350		scheduled t	10.1	7.6	-
CLEAR CREEK MEADOUS	9420	**			14.8	8.0
CLEAR CREEK RIDGE \$1 CLEAR CREEK RIDGE \$2 CLEAR CREEK RIDGE \$3	9200 8000	12/27	31	8.7	11.0	7.7
CLEAR CREEK RIDGE #2	6600	12/27 12/27	26 19	6.5	8.4	6.2
CUB RIVER R.S.	5450	12/26	20	4.1 4.8	5.1 5.0	3.5
CURRANT CREEK	8000	12/27	26	7.7	7.7	3.5 3.5 3.9
DANIELS-STRAMBERRY DESERET PEAK	8000	12/27	31	10.8	9.3	5.7
DILL'S CAMP	9250 9200	12/28	scheduled t 24	his month	-	9.2
DONKEY RESERVOIR	9800	12/29	16	7.2 3.9	8.4	5.2
DRY BREAD POND	8350	12/27	26	7.8	12.4	6.8
DRY VALLEY DIVIDE AL	8100	*		, , ,	7.4	6.7
DUCK CREEK R.S. EAST PORTAL	8700	01/01	-	5.9E	9.2	5.1
EAST SHINGLE LAKE	7560 9800	#	nahadut - d	-1.4	8.8	4.8
FARMINGTON CANYON	8000	12/26 12/26	51	this month	21.9	12.6
FARMINGTON CANYON L.	6950	12/26	43	12.4	16.8	9.5
FARNSWORTH LAKE	9600	12/28	30	8.9	10.4	7.9
FISH LAKE FIVE POINT LAKE	8700 11000	12/29 01/01	22	5.2 8.4	3.8	3.1
FRANKLIN BASIN	8020	12/26	35	11.0	15.9	7.e
G.B.R.C. HEADQUARTER		12/20	32	10.2	9.8	6.8
G.B.R.C. MEADOWS		12/28	39	12.7	14.2	9.0
GARDEN CITY SUMMIT GEORGE PEAK	7600 9000	12/26 Not	32	9.8 this month	11.5	7.3
GOOSEBERRY R.S.	8000	12/28	23	6.7	6.7	5.2
GRIZZLY RIDGE	8500	*			4.3	4.3
HARDSCRABBLE	6700 7700	12/26	40	12.5 3.8	16.5	_
HARRIS FLAT HAYDEN FORK	9400	12/31 12/26	17 24	7.1	7.4	3.2
HENRY'S FORK	10000			this month	8.5	5.6
HEWINTA G.S.	9500	12/26	19	4.2	4.5	3.5
HOLE-IN-THE-ROCK HOLE-IN-THE-ROCK GS	9150 8300	12/26	15	3.4		2.2
HICKERSON PARK	9100		16	this month	3.0	1.9
HOBBLE CREEK SUMMIT	7420	12/27	30	8.5	9.9	5.9
HORSE RIDGE	8260	12/27	34	10.3	15.0	7.6
MUNTINGTON-HORSESHOE	9800	12/28	38	13.8	13.2	7.9
INDIAN CANYON JACKSON PARK	9100 10600	12/27	31	7.9	8.0 8.1	5.3 2.7
JOHNSON VALLEY	8850	12/29	19	4.9	4.5	2.9
KİLFOIL CREEK	7300	12/27	29	7.3	10.2	4.8
KIMBERLY MINE (UPPER)	9300	12/31	36	9.3	9.3	6.0
KING'S CABIN (UPPER) KLONDIKE NARROWS	8730 7400	12/27 12/26	21 31	5.4 9.5	5.5	4.4
KOLOB-CRYSTAL	9250	12/31	34	9.6	14.0	7.7 6.5
LAKEFORK BASIN	11100	01/01	_	10.3	-	-
LAKEFORK MOUNTAIN \$1	10200	12/27	29	8.8	6.9	4.2
LAKÉFORK MOUNTAIN #3 LAMBS CANYON	8400 7400	12/27 12/30	19 32	4.8 9.4	4.6	2.2
LASAL MOUNTAIN LONER	8800	12/18	23	6.6	12.9 3.3	7.4 4.7
LASAL HOUNTAIN (UPP)	9850	12/18	33	9.2	5.4	6.9
LIGHTNING LAKE	10500	01/01		15.3	-	-
LILY LAKE LITTLE BEAR (LOWER)	9050 6000	12/26 12/26	31 28	9.1 7.6	9.1	-
Earlie Denn (Ednen)	5500	/ 20	20	,	8.5	3.6

SHOWCOURSE	ELF	J. DA	TF S	NOW	WATER	LAS	T AVER
LITTLE BEAR (UPPER LITTLE GRASSY CREE! LONG FLAT LONG VALLEY JCT. LOST CREEK RESERVOI MAMHOTH-COTTONHOOD MERCHANT VALLEY (UP MIDDLE BEAVER CREEK MIDDLE FORK MIDDLE FORK MIDDLE YOLLEY			DE	PTH C	ONTENT	YEA	R 1961
LITTLE BEAR (UPPER	) 6550	12/	 26	32	0.1		
LITTLE GRASSY CREE	K 6100	12/	30	3	0.4	5.	6 1
LONG FLAT	8000	12/3	30	12	3.6	4.	5 2
INST CREEK RECEDUA	7500	12/2	29	14	3.8	6.	7 1
MAMMOTH-COTTONHOOD	0000	12/2	7	17	3.5	4 - 1	1.
MERCHANT VALLEY (UP	9750	12/2	11 1	42	14.3	14.8	8.
MIDDLE BEAVER CREEK	8650	12.0	Not sched	iled the	7 . 0	/•7	٠ .
MIDDLE CANYON	7000	01/0	2 2	7	6.7	_	5.
MIDDLE FORK	9600		t			-	-
MILL CREEK	4850	12/3	1 3	4	9.0	15.3	8.
HILL D SOUTH FORK	7400	12/3	1 3	0	9./	13.3	7.
NONTE CRISTO R.S.	8960	12/2	6 3	5 1	1.2	14.0	(*)
MONTICELLO PARK	7050	*		•		2.0	1.6
HT PAIRY B C	9500	12/27	7 2	7	7.3	6.4	4.
MUD CREEK ±2	9500	12/28	4:	3 1:	3.7	13.5	9.1
DAK CREEK	7760	01/01	2	,	7.5	8.4	5.7
DNE MILE SUMMIT	7330	No.	t schadul		. 2	6.4	5.0
DRANGE OLSEN	7200	*	or schedul	en curs	month	4.5	1.4
DANGUTTON LAKE	9600	12/31	38	3 9	. 9	8.1	5.1
PARADITE PAPE	8200	12/31	13	3	. 6	4.3	2.5
PARK CITY SUMMIT	9300	12/2/	32	9	• B	B + 7	5.6
PARLEY'S CANYON SUM.	7500	12/30	z schednje	ed this	month	19.5	14.7
PAYSON R.S.	8050	01/01	33	Ŕ	.9	11.0	7.7
PICKLE KEG SPRING	9600	12/28	27	7	.8	8.7	6.1
PINE CHRIUN	8000	12/27	31	9	. 8	15.1	6.8
REDDEN MINE LOWER	8500	12/31	34	9	• 9	9.1	6.8
RED PINE RIDGE	9200	12/28	27	10.	. 7	11.9	6.6
REES'S FLAT	7300	01/01	30	7.	4	9.4	6.7
REYNOLDS PARK	10400	Not	schedule	d this m	on th	-	3.0
ROCKY RASTN-SETTIEMT	7900	12/27	24	6.	6	7.7	2.2
SAGEBRUSH FLAT	6300	01/02	35	11.	3	-	18.1
SEELEY CREEK R.S.	10000	12/28	31		•	4.8	2.2
SERGEANT LAKES	8300	Not	scheduled	this w	an th	13.1	4.7
STITUED LAKE CONTROL	6200	12/30	15	3.	7	3.3	4.3
SMITH & MORFHOUSE	8730	12/31	41	12.	9	17.3	10.0
SHOHBIRD GAD VALLEY	9700	12/26		7.	6	9.2	5.3
SDAPSTONE R.S.	7800	01/01	scheduled	this me	onth	7 0	11.9
SPIRIT LAKE	10300	12/27	27	7.6		5.2	5.4
SQUAH SPRINGS	9300	12/29	20	4.8		4.2	3.1
STEEL CREEK PARK	10100	12/26	36	9.7		8.0	6.3
SIFFE HOLLOW #1	8500	*			2	22.4	13.2
STILLHATER CAMP	8550	12/24	21		1	7.4	8.9
STRAHBERRY DIVIDE	B400	12/31	44	12.1		5.8	4.0
STUART R.S.	7950	12/28	19	4.1		6.2	2.1
SUSC RANCH	8200	01/06	17	5.0		5.8	3.4
THISTIF FLAT	8800	01/06	28	6.5		8.4	6.0
TIMPANOCOS DIVIDE	8140	30 AOL	scheduled	this mo	nth	-	2.2
TONY GROVE LAKE	8400	12/26	57	17.0			10.4
TONY GROVE R.S.	6250	12/26	25	6.6	- 4	2.2	14.2
TRIAL LAKE	9960	12/26	49	15.8	1	4.0	10-7
HPPED INCO HALLEY	9400	12/27	23	6.2	- ;	5.9	4.3
VERNON CREEK	7500	12/28	21	5.3	8	8.6	4.2
VIPONT	7670	Not	25 scheduled	6.2	neh	-	4.0
MEBSTER FLAT	9200	12/31	26	6.5	41	. 7	7.2
WHITE RIVER #1	8550	12/27	30	8.1	11	7.6	5.3
WILLE RIVER #3	7400 :	12/27	21	4.9	É	5.1	3.8
WILLOW FLAT	Y500	12/29	23	6.2	7	7.3	5.0
WRIGLEY CREEK	9000	12/28	32	9.2	8	8.8	6.1
LOST CREEK RESERVOI MAHAOTH-COTTONHOOD MERCHANT VALLEY (UP MIDDLE BEAVER CREEK MIDDLE CANYON MIDDLE FORK MIDHAY VALLEY MILL D SOUTH FORK MOTHER CRISTO R.S. MONTICELLO PARK MOSEY MOUNTAIN(LOH) MT. BALDY R.S. MUD CREEK *2 OAK CREEK ONE MILE SUMMIT ORANGE OLSEN OTTER LAKE PARADISE PARK PARKOTITY SUMMIT PARLEY'S CANYON SUM. PAYSON R.S. PICKLE KEG SPRING PINE CANYON PINE CREEK REDDEN MINE LOHER RED PINE RIDGE REES'S FLAT REYNOLDS PARK ROCK CREEK ROCK CREEK ROCK CREEK RED FINE RIDGE REES'S FLAT SELLEY CREEK R.S. SERGEANT LAKES SHINGLE MILL SILVER LAKE(BRIGHT.) SMITH & MOREHOUSE BNOMBIRD GAD VALLEY SOMASTONE STEEL CREEK PARK STEEP MOLLON *2 STILLHATER CAMP STRAHBERRY DIVIDE STUART R.S. SUSC RANCH TALL POLES THISTLE FLAT TIFFANGOS DIVIDE TONY GROVE R.S. TRIAL LAKE TONY GROVE TONY TONY TONY TONY TONY T	8700	12/30	17	4.0	7	. 4	4.3
				7.0	-	,,,	4.1

ROTE \* These sites have been discontinued during the past summer as a result of the Soil Conservation Service Snow Course Reduction Plan, PHASE-I. These sites have proved to be duplicative in nature.

Black's Fork, Duck Creek R. S., and Sospincarive in nature.

Black's Fork, Duck Creek R. S., and Sospince R. S. snow courses have also been discontinued as a result of statistical testing in FHASE-II of the above mentioned plan. For these sites, however, estimates will be produced and published monthly for the next five years.